

ABSTRACT

An improved computer based surgical video overlay system that allows relevant surgical data from a surgical apparatus to be combined as a graphic image with the video image of a surgical procedure in which the data from the surgical apparatus is sent wireless to the video overlay console. Elimination of the data cable between the surgical apparatus and the video overlay console is advantageous in an operating room environment . The same computer based surgical video overlay system runs computer program that occupies a user interface to allows definition of operation modes, input of relevant data, selection of data overlay graphic screen templates and various methods for customization. A time coded-data file is created and stored including all the relevant parameters of a surgical procedure. This file contains the same time-code included in the graphic image overlaid in the surgical video signal. An precise match can be performed between the recorded data on file and the surgical video recording. An audio pre-amplifier section is provided to include surgical apparatus meaningful sounds produced during surgery. The alternative embodiment considers the use of an embedded computer within the video overlay console making the system capable of standalone operation providing a user interface and data input/output capabilities.
